

Amendments to the Claims:

1. (Previously amended) A method of conserving power consumption in a communication system which includes components capable of selectively entering a low power mode, components capable of determining eligibility of the system to enter a low power mode based on operator generated signals, time of day, or non-use of the system for a period of time, or a combination thereof, and an auto-negotiation feature by exchanging messages indicative of a low power mode capability, using an auto-negotiation feature to interpret exchanged signals to verify that connected systems include the low power mode capability and eligibility to enter the low power mode, and transmitting a signal that a communications session is completed to cause connected systems to enter the low power mode.
2. (Original) The method of claim 1 wherein said auto-negotiation feature is a next-page facility.
3. (Canceled)
4. (Previously amended) In a system utilizing a data communication device having a plurality of data exchange modes, each of said modes operating at different speeds, one of which speeds consumes less power than another, protocol means for compatibly coupling said data communication device to another data communication device for exchanging data therebetween, and selection means in said data communication device for a data exchange mode having a higher speed than the others, a method for switching to a least power consuming speed which consumes less power when in an idle mode, by exchanging data representative of said data communication devices ability and eligibility to operate at the least power consuming speed,

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decoding via said protocol means said representative data, and changing to said least power consuming speed in response to another protocol signal.

5. (Original) In a local area network which includes Ethernet data terminal equipment capable of low power modes and employing auto-negotiation, a method for conserving power consumption during periods of low usage by using a next-page aspect of the auto-negotiation feature to communicate among terminal data equipment each equipment's capability to assume a low power mode, detecting periods of low network usage, verifying in response to detection of low network usage that each equipment is eligible to assume the low power mode by use of the auto-negotiation feature, and asserting signals to put each eligible equipment in a low power mode of operation.

6. (Previously presented) The invention as defined in claim 1 wherein the components to put the system in low power mode are selectively detectable and control portions of a physical layer device in said system.

7. (Previously presented) The invention as defined in claim 4 wherein the protocol to put the system in low power mode selectively detects and selectively controls portions of a physical layer device in said system.

8. (Previously presented) The invention as defined in claim 5 wherein the method to put the system in low power mode selectively detects and selectively controls portions of a physical layer device in said system.

9. (New) The invention as defined in claim 1 wherein the eligibility to enter the low power mode is stored in the system.

10. (New) The invention as defined in claim 1 wherein the eligibility to enter the low power mode is stored in binary bits in the system.

11. (New) The invention as defined in claim 10 wherein the binary bits are located in the organizationally unique identifier.

12. (New) The invention as defined in claim 10 wherein the eligibility is stored in at least one bit.

13. (New) The invention as defined in claim 4 wherein the eligibility to enter the least power speed is stored in the system.

14. (New) The invention as defined in claim 4 wherein the eligibility to enter the least power speed is stored in binary bits in the system.

15. (New) The invention as defined in claim 14 wherein the binary bits are located in the organizationally unique identifier.

16. (New) The invention as defined in claim 14 wherein the eligibility is stored in at least one bit.

17. (New) The invention as defined in claim 5 wherein the eligibility to enter the low power mode is stored in the system.

18. (New) The invention as defined in claim 5 wherein the eligibility to enter the low power mode is stored in binary bits in the system.

19. (New) The invention as defined in claim 18 wherein the binary bits are located in the organizationally unique identifier.

20. (New) The invention as defined in claim 18 wherein the eligibility is stored in at least one bit.